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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,279	01/09/2007	Takayuki Kondo	200380-9054	9404

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CHICAGO, IL 60601

EXAMINER

YUN, EUGENE

ART UNIT	PAPER NUMBER
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2618

MAIL DATE	DELIVERY MODE
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12/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,279	Applicant(s) KONDO, TAKAYUKI	
	Examiner EUGENE YUN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-6, 8-11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudrapatna (U.S. Pub. No. 2004/0092233 A1) in view of Chen (US 7,443,816).

Referring to claim 1, Rudrapatna discloses a mobile communication system in which variable rate transmission is performed over a downlink radio channel (see title, abstract, para[009], [0015]) among a base station control apparatus (20 of fig.1), a radio base station (14 of fig.1), and a mobile station (16 of fig.1), the radio base station (14 of fig.1) comprising:

(i.e. demultiplexer 44, determine and provide transmission information rate according to received power control rate command from the wireless terminal unit (WTU) i.e. mobile unit)

and a transmission power control (i.e. changing) part (58 of fig. 1) for controlling, changing and adjusting a transmission power of the transmission data in accordance with a forward error correction associated with gain difference (determine by the automatic gain controller 48 and power controller 58) and depending on the determined transmission rate (see figs 1 and 2 and para[0020], [0022], [0023], [0025])

(i.e. transmission power controller 58 command extracting, changing transmission power of a transmission data in accordance with determining the gain (algorithm is used for determining the gain by the automatic gain controller 48 and power controller 58) and quality measurer 54 determine bit error rate based on forward error rate which is associated with gain based on the determining transmission rate)

Rudrapatna does not teach a transmission rate determining part for determining a transmission rate in accordance with a size of transmission data to the mobile station. Chen teaches a transmission rate determining part for determining a transmission rate in accordance with a size of transmission data to the mobile station (see col. 3, lines 5-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chen to said device of Rudrapatna in order to eliminate unnecessary reductions in transmission time between base station and mobile station.

Claims 6 10, and 16 have similar limitations as claim 1.

Referring to Claims 3 and 13, Chen further discloses variable rate (rate increment / decrement) control is performed by setting (i.e. incrementing) and setting (i.e. attaching) rate information by the demultiplexer specifying a transmission rate by

Art Unit: 2618

each transmission frame in accordance with the transmission data size which is obtained from the mobile station among the base station control apparatus, the radio base station and the mobile station (see col. 1, lines 46-54).

Referring to Claims 4 and 14, Chen further discloses the mobile station includes a transmission rate determining part for estimating a transmission rate from a power distribution of a received signal from base station (see col.59, lines 49-60).

Referring to Claim 5, Rudrapatna further discloses the communication system is a CDMA (Code Division Multiple Access) radio network in which variable rate transmission is performed over a downlink channel (see fig. 1,2,3 and para [0014],[0015]).

Referring to Claim 8, Rudrapatna further discloses the radio base station (14 of fig. 2) further comprising:

a transmission frame producing part (44 of fig.2) for encoding by the encoder (32 of fig.2) the transmission data into a transmission frame and a transmitting part (38 of fig. 2) for transmitting the determined transmission rate and the encoded transmission frame in accordance with the determined transmission power (see fig. 1,2 and para [0019],[0022],[0023],[0025]).

Referring to Claim 9, Rudrapatna further discloses the communication system is a CDMA (Code Division Multiple Access) radio network in which variable rate transmission is performed over a downlink channel (see fig. 1,2,3 and para[0014],[0015]).

Referring to Claim 11, Chen also teaches the step of determining the transmission power carried out with reference to one or more tables prepared in advance that show the relations among the transmission data size, the error correction gain difference, and a change amount of the transmission power (see table in fig. 4).

Referring to Claim 15, Rudrapatna further discloses the communication system is a CDMA (Code Division Multiple Access) radio network in which variable rate transmission is performed over a downlink channel (see fig. 1,2,3 and para[0014],[0015]).

4. Claims 2, 7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudrapatna (U.S. Pub. No. 2004/0092233 A1) and in view of Tsien et al. (US 7,328,037).

Referring to Claims 2, 7, and 12, Rudrapatna does not teach the transmission power is reducing when the transmission rate is large, and transmission power is increasing when the transmission rate is small. Tsien teaches the transmission power is reducing when the transmission rate is large (see ABSTRACT), and transmission power is increasing when the transmission rate is small (see col. 5, lines 55-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Tsien to said device of Rudrapatna in order to mitigate weak transmission signal.

Response to Arguments

Art Unit: 2618

5. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571)272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun
Examiner
Art Unit 2618

/Eugene Yun/

Application/Control Number: 10/573,279

Page 7

Art Unit: 2618

Examiner, Art Unit 2618

/E. Y./

Examiner, Art Unit 2618